

ENAV Strategy to support U-Space deployment





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Setting the scene



ANSP responsibilities		Drone Invaders challenges
	Airspace safety & reliability	Rapid growth of drones, without proper regulation and dedicated supporting services, impacts airspace safety and reliability
	Airspace accessibility	Drones need to be safely accommodated
	Creation Of Public Value	Strong concerns about security and privacy Urgency to unlock the enormous potentials promised by full exploitation of drone based services
	Financial sustainability	Innovative services offered to new kind of users need to be financially sustainable and can generate new revenue streams



ENAV answers



The U-Space development and deployment is a key answer to the Drone Invaders

ENAV promotes a strong engagement of ANSPs in the U-Space

ENAV is already implementing the Italian U-Space

The Registration and the collaborative (e-)identification process built on top, are the first building blocks of such implementation.

Implementing the UTM



Participation to international activities (ICAO, EASA, GUTMA, ...)



Partnership with the National Aviation Authority



Collaborative environment to launch BVLOS operations



Development and deployment of the Italian UTM solution



Participation to international activities



RPAS Panel



WG2



EASA, RMT.0230



CANSO, CTTF e EASA TF



Full member
technical WGs



PJ20 WG2.9



EUROCAE, WG-105



NATS

Shared strategy with other
ANSPs such as DFS, NATS,
etc.



Partnership with the National Aviation Authority

ENAC and ENAV agreement - August 2016

1. Registration and E-Identification

Provide a system for web registration (www.d-flight.eu). ENAV is indicated as the Provider of the Registration and e-identification services for drones (currently only those for professional use) on behalf of ENAC

2. BVLOS regulatory framework

Sets a collaborative framework to enable BVLOS operations:

- BVLOS concept of operations (2016)
- BVLOS validation campaign (2017, ongoing)
- Setting of regulations and standards

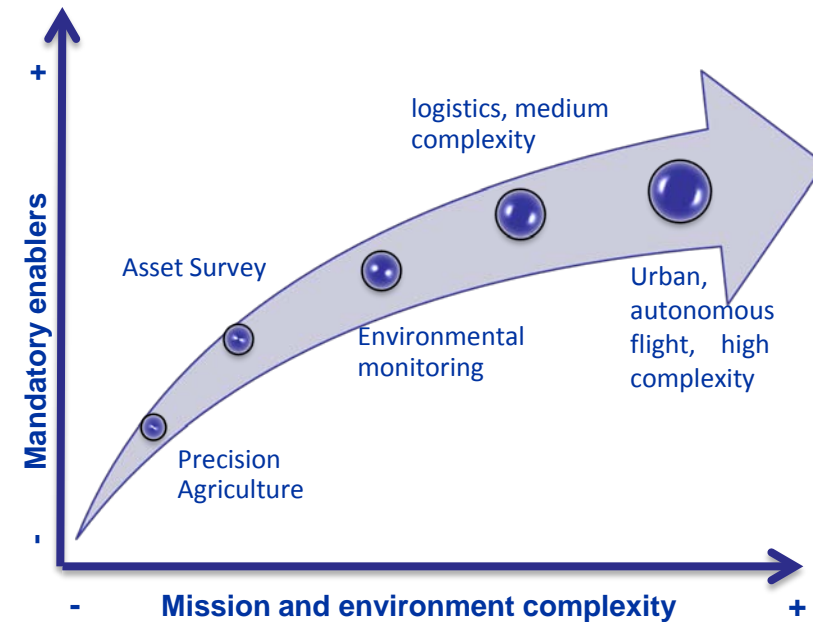
3. Infrastructure

ENAV commits to the development and deployment of the UTM system infrastructure in Italy



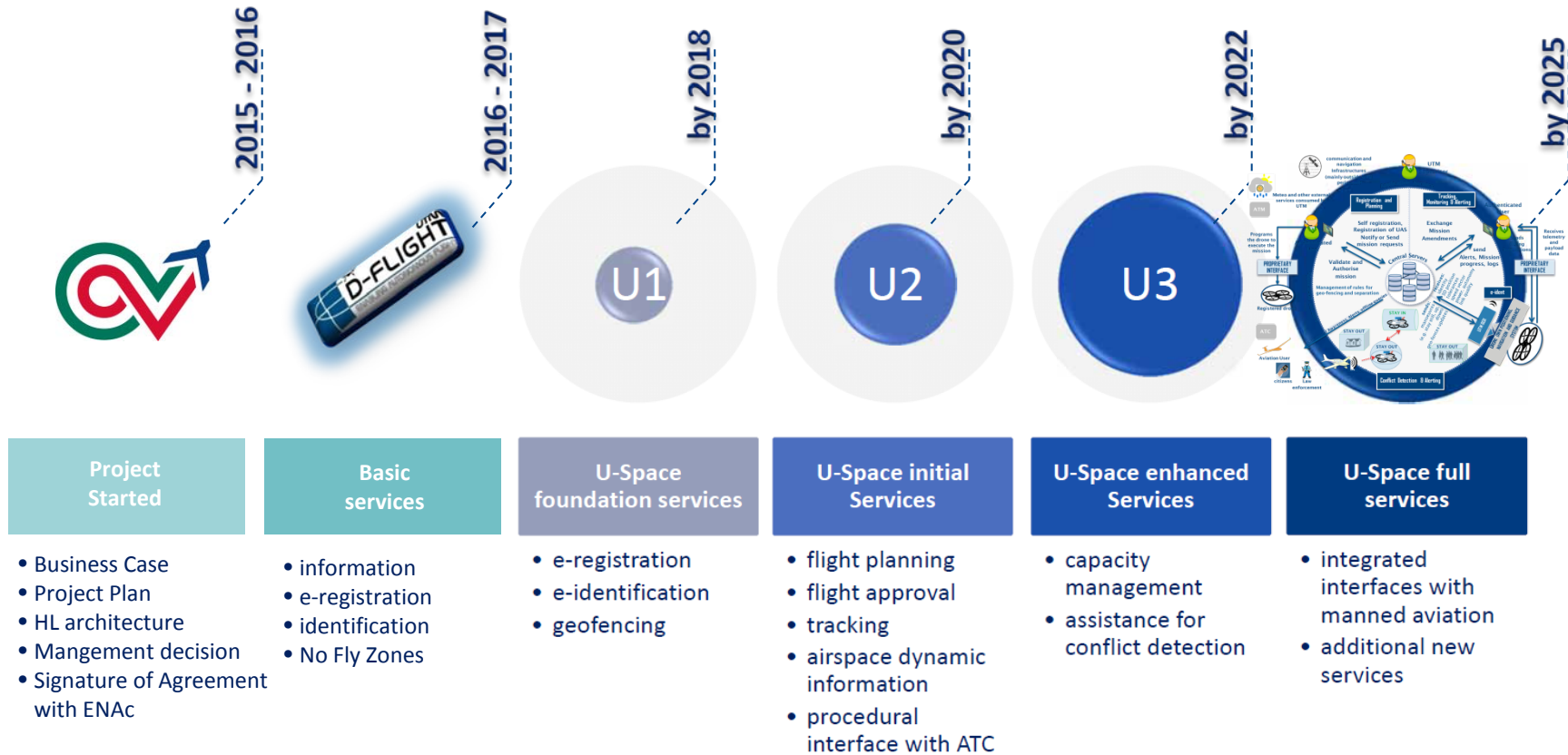
Collaborative environment to launch BVLOS operations

- Face to face meetings and activities involving ENAC, ENAV, and key national industrial players, public entities and drones operators
- BVLOS concept of operations released
- Ongoing validation campaign on the field
- Focus on the Asset Survey



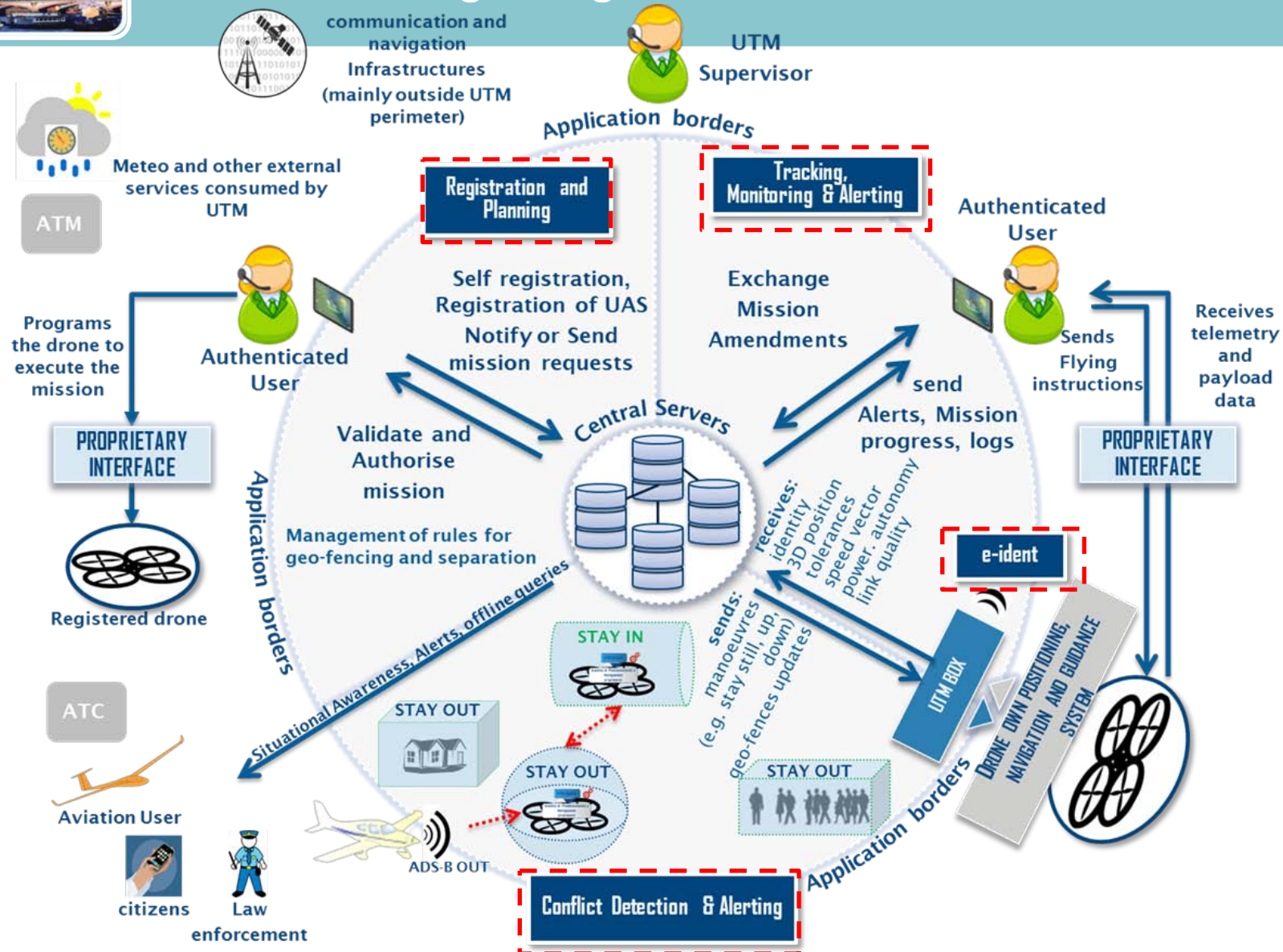


Development and deployment of the Italian UTM solution: the roadmap





Development and deployment of the Italian UTM solution: d-flight target architecture





Development and deployment of the Italian UTM solution: the PPP

D-Flight will be further developed and deployed by a Public Private Partnership (PPP), between ENAV and an industrial partner, being selected through an open competitive tender

- Selection process is ongoing:
 - it was started in August 2016
 - it will be finished by 2017
- The industrial partner will act as the main technological supplier
- ENAV will retain control of the PPP



Conclusions

- UTM is a key element to answer the challenges related to Drones
- ANSPs need to keep a governing role in the UTM/U-Space, as they are responsible for providing safe and fair access to public airspace to all type of users
- Institutions, States and Stakeholders have to cooperate to:
 - respond to market and social demand
 - timely support full exploitation of drones potentials and benefits
 - ensure safe and secure integration of drones in the airspace
 - identify a financially sustainable framework
- ENAV, in agreement of its regulator, have started the development and deployment of UTM in Italy